

SOA 2010-11

**Priest Rapids Coordinating Committee Hatchery Subcommittee
Statement of Agreement on Grant PUD's UCR Steelhead Mitigation Requirement**

Submitted to PRCC Hatchery Subcommittee: September 16, 2010

Approved by PRCC Hatchery Subcommittee: September 23, 2010

Statement

The Hatchery Subcommittee of the Priest Rapids Coordinating Committee (PRCC) agrees that the hatchery summer steelhead smolt production requirement for the Public Utility District No. 2 of Grant County (Grant PUD) of 100,000 yearling steelhead as identified in the Priest Rapids Project Salmon and Steelhead Settlement Agreement shall be met, beginning with the 2011 Brood Year (BY) through using Wells Hatchery and overwinter acclimation and adult collection facilities in the Okanogan Basin. Existing and future facility improvements at Wells Hatchery will be used for adult collection (as needed), holding, spawning, and rearing. Adult collection (as available) and overwinter, and/or short-term acclimation or direct release of smolts will occur in the Okanogan River Basin. This approach will be utilized to support the continuation of a locally-adapted steelhead program as the Colville Confederated Tribes (CCT) develop a Bonneville Power Administration (BPA) funded, locally-adapted steelhead program in the Okanogan River Basin, consistent with provisions of the Columbia River Federal Power System (FCRPS) Biological Opinion and the Colville Tribal Fish Accords (Accords). At such time as the CCT have established a locally-adapted steelhead program through the FCRPS and Accords, Grant PUD mitigation will continue to be met at Wells Hatchery; however, Okanogan-based broodstock source and the number of juvenile steelhead released in the Okanogan River Basin (Grant PUD mitigation) will progressively be reduced, consistent with increases in production associated the locally-adapted steelhead program funded by BPA and will be released in the mainstem Columbia River at or above Wells Dam. The approach described in this SOA will be reflected in a revised Artificial Propagation Plan. If the accord project does not meet the recovery needs of the Okanogan Basin, the HSC may consider reinstating a portion of Grant County PUD's mitigation requirement in this Basin.

Background

Steelhead mitigation requirements are included in the terms and conditions of Grant PUD's license to operate the Priest Rapids Project (FERC Project 2114) and are specifically outlined in the Salmon and Steelhead Settlement Agreement and the 2008 National Marine Fisheries Service Biological Opinion for the Priest Rapids Project.

“UCR Steelhead Supplementation Plan. FERC shall require Grant PUD to complete, in consultation with the PRCC and subject to NOAA Fisheries approval an Artificial Propagation Plan to rear and release up to 100,000 yearling UCR steelhead for release in the UCR basin. The plan shall be consistent with recovery criteria for UCR steelhead and other artificial propagation programs.”

The license also specifies that the program should be adaptively managed and should use existing facilities where possible.

In an attempt to co-fund the CCT steelhead program with BPA using the Cassimer Bar Hatchery, Grant PUD signed a two-year contract with CCT in 2007 and renewed it for an additional two years in 2008. The current agreement will be completed on December 31, 2010. The Cassimer Bar Hatchery was acquired by CCT after being decommissioned in a previous attempt as a culture facility for sockeye salmon. Smolt-to-adult return rates (SARs) to date for Cassimer Bar Hatchery steelhead are lower than expected. At current SARs, it will be unlikely to effectively implement a locally-adapted steelhead program at the current production goals (40,000 and 100,000 fish, respectively) stated in the SOA 2009-06 to be met for the 2011 and 2015 releases and to effectively support recovery efforts. Recently, several issues associated with existing infrastructure at the Cassimer Bar Hatchery were identified as potential ways to improve the performance of the facility, including no surface water supply, potential plumbing constraints, dated infrastructure associated with well pumps and supply lines, no flow-measuring equipment, and current capacity limited to less than 40,000 smolts. In addition to hatchery capital upgrades, overwinter/short-term acclimation and adult-trapping facilities are also needed. Substantial infrastructure improvements at Cassimer Bar or an entirely new hatchery facility in the Okanogan River Basin may be necessary to provide increased efficacy of the current locally-adapted steelhead program to aid recovery efforts.

Adopting the new steelhead strategy described in this SOA is expected to provide the following benefits:

- Use of existing and improved facilities and at Wells Hatchery allows for the continuation of the current locally-adapted steelhead program in the Okanogan River Basin as CCT progress through the NPPC hatchery 3-step process and a single locally-adapted steelhead program is developed in the Okanogan Basin, consistent with the FCRPS BiOp and the Accords.
- Ensures that Grant PUD mitigation obligation is met in the near and long-term without dependency upon the NPPC Hatchery 3-step Planning Process schedule.
- Improved recovery efficacy through expected increases in SARs of the locally-adapted steelhead program relative to the existing program. Existing SARs for the Cassimer Bar program are low (Table 1). Wells Hatchery has shown previous success with steelhead survival rates. According to two years of data by CCT, steelhead reared at Wells Hatchery and released into Okanogan Basin tributaries resulted in higher survival rates than steelhead reared at Cassimer Bar Hatchery and released into the same tributaries (Table 2).

Table 1. PIT tagged smolt releases and adult PIT tag returns of the Cassimer Bar locally-adapted steelhead above Wells Dam, brood years 2003-2006. (Colville Confederated Tribes unpublished data).

Brood Year	Release Year	Number of PIT Tagged Smolts	Total Brood Year Return	Number of Broodstock Used	SAR (%)
2003	2004	3,450	1	4	0.029
2004	2005	13,442	1	17	0.007
2005	2006	19,862	9	17	0.047
2006	2007	19,836	17	12	0.081
2007	2008		Pending	13	
2008	2009		Pending	11	

Table 2. PIT tagged smolt releases and adult PIT tag recoveries at and above Wells Dam, BY 2002-2006 (Colville Confederated Tribes unpublished Data).

Brood Year	Stock	Release Year	Number of PIT Tagged Smolts	Total Brood Year PIT Tag Returns	PIT Tag SAR (%)
2002	Wells	2003	7,478	38	0.51
2002	Cassimer	N/A	N/A	N/A	N/A
2003	Wells	2004	5,570	22	0.39
2003	Cassimer	2004	3,415	1	0.03
2004	Wells	2005	5,565	3	0.05
2004	Cassimer	2005	13,308	1	0.01
2005	Cassimer	2006	19,687	9	0.05
2006 ¹	Cassimer	2007	19,725	17	0.081

Note:¹-incomplete brood year return.

The PRCC Hatchery Subcommittee approved the UCR steelhead requirement for Grant PUD through SOA 2009-06 signed on September 18, 2009. This SOA outlines Cassimer Bar Hatchery steelhead production in a step-wise approach, with 40,000 smolts to be released by 2011 and 100,000 to be released by 2015. These production goals were to be adaptively managed based on the performance of the Cassimer Bar program. During the interim, the shortfall of the 100,000 smolt requirement is to be made up at Wells Hatchery. Prior to Grant PUD's involvement with the Cassimer Bar program, it used the Wells Hatchery to meet full mitigation for steelhead.

In addition to GPUD's mitigation requirement, BPA also has mitigation responsibilities for UCR steelhead outlined in the Federal Columbia River Power System (FCRPS) Biological Opinion (NOAA Fisheries 2008) and in the Colville Tribal Fish Accords (BPA 2005). Specifically, BPA shall implement a locally adapted steelhead artificial propagation program in the Okanogan River Basin to enhance the recovery of the Okanogan River UCR steelhead population.

Originally the locally-adapted steelhead program in the Okanogan River basin was envisioned to be a cooperative effort between Grant PUD and BPA to satisfy both Grant PUD and BPA mitigation requirements; however, delays in the Northwest Power and Conservation Council (NPPC) 3-step hatchery planning process has confounded the ability to implement a cooperative effort between Grant PUD and BPA.

During 2008, the CCT developed and submitted to the NPPC a Master Plan and a Hatchery Genetics Management Plan (HGMP) for the implementation of a locally-adapted steelhead conservation program in the Okanogan River Basin, including the production of up to 200,000 yearling smolts to aid in recovery of the Okanogan steelhead population and to provide for Tribal and non-tribal harvest opportunities in the UCR and Okanogan River Basin. Through the NPPC 3-step process, the Independent Scientific Review Panel (ISRP) reviewed the Master Plan and HGMP and determined that the program was “fundable in part” and that additional information was necessary relative to the programs scientific merit relative to recovery efficacy. The CCT is currently re-writing the Master Plan and have amended the HGMP to address the ISRP concerns associated with recovery efficacy of the proposed program. The Master Plan and HGMP are expected to be re-submitted to the NPPC in October-November of 2010 as CCT re-initiates the NPPC 3-step process.

The time frame for completion of the NPPC 3-step process is unknown, but may be several years before it is complete and Grant PUD must make a long-term commitment with Douglas PUD to insure long-term access to capacity at Wells Hatchery (where 80% of current mitigation is produced) before the end of 2011 in order to reserve said capacity.